

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-21. (Cancelled).

22. (New) A transmitting apparatus of outputting a video signal generated by a video signal generating apparatus of generating said video signal constructed with frames, to a receiving apparatus having a receiving unit receiving a transmitted video signal and an output unit outputting said received video signal by means of scanning lines, said apparatus comprising:

a block dividing unit zone-dividing said frame into a predetermined number of blocks in parallel to the scanning lines of said output unit of said receiving apparatus;

a region determining unit comparing each block of said predetermined frame generated by said block dividing unit with each block corresponding to the block within an immediately preceding frame of said predetermined frame, and thereby determining a rectangular region having a different pixel value;

an extracting unit extracting a video signal included in (1) the determined rectangular region or (2) a rectangular region obtained from the determined rectangular region by applying a predetermined rule; and

a transmitting unit coding the video signal extracted by said extracting unit and then transmitting the signal to said receiving apparatus.

23. (New) A transmitting apparatus of outputting a video signal generated by a video signal generating apparatus of generating said video signal constructed with even number fields and odd number fields, to a receiving apparatus having a receiving unit receiving a transmitted video signal and an

output unit outputting said received video signal by means of scanning lines, said apparatus comprising:

a block dividing unit zone-dividing said even number field or odd number field into a predetermined number of blocks in parallel to the scanning lines of said output unit of said receiving apparatus;

a region determining unit comparing each block of said even number field or odd number field generated by said block dividing unit with each block corresponding to the block within an immediately preceding even number field or odd number field of said predetermined even number field or odd number field, and thereby determining a rectangular region having a different pixel value;

an extracting unit extracting a video signal included in (1) the determined rectangular region or (2) a rectangular region obtained from the determined rectangular region by applying a predetermined rule; and

a transmitting unit coding the video signal extracted by said extracting unit and then transmitting the signal to said receiving apparatus.

24. (New) A transmitting apparatus according to claim 22, wherein said predetermined rule is that when each of said blocks adjacent in a horizontal or vertical direction has a rectangular region determined by said region determining unit, a rectangular region is generated that includes both of the rectangular regions of said blocks adjacent in a horizontal or vertical direction.

25. (New) A transmitting apparatus according to claim 24, wherein said region that includes both of the rectangular regions of said blocks adjacent in a horizontal or vertical direction indicates a minimum rectangular region that includes both of said rectangular regions of said blocks adjacent in a horizontal or vertical direction.

26. (New) A transmitting apparatus according to claim 23, wherein said predetermined rule is that when each of said blocks adjacent in a horizontal or vertical direction has a rectangular region determined by said region determining

unit, a rectangular region is generated that includes both of the rectangular regions of said blocks adjacent in a horizontal or vertical direction.

27. (New) A transmitting apparatus according to claim 26, wherein said region that includes both of the rectangular regions of said blocks adjacent in a horizontal or vertical direction indicates a minimum rectangular region that includes both of said rectangular regions of said blocks adjacent in a horizontal or vertical direction.

28. (New) A transmitting apparatus according to claim 22, wherein said predetermined rule is that when each of said blocks adjacent in a horizontal or vertical direction has a rectangular region determined by said region determining unit and when these rectangular regions contact with each other in a horizontal or vertical direction, a rectangular region is generated that includes both of the rectangular regions of said blocks adjacent in a horizontal or vertical direction.

29. (New) A transmitting apparatus according to claim 28, wherein said rectangular region that includes both of the rectangular regions of said blocks adjacent in a horizontal or vertical direction indicates a minimum rectangular region that includes both of said rectangular regions of said predetermined blocks adjacent in a horizontal or vertical direction.

30. (New) A transmitting apparatus according to claim 23, wherein said predetermined rule is that when each of said blocks adjacent in a horizontal or vertical direction has a rectangular region determined by said region determining unit and when these rectangular regions contact with each other in a horizontal or vertical direction, a rectangular region is generated that includes both of the rectangular regions of said blocks adjacent in a horizontal or vertical direction.

31. (New) A transmitting apparatus according to claim 30, wherein said rectangular region that includes both of the rectangular regions of said blocks adjacent in a horizontal or vertical direction indicates a minimum rectangular region that includes both of said rectangular regions of said predetermined blocks adjacent in a horizontal or vertical direction.

32. (New) A transmitting apparatus according to claim 22, wherein said region determining unit determines said rectangular region in parallel to the scanning lines of said output unit of said receiving apparatus.

33. (New) A transmitting apparatus according to claim 23, wherein said region determining unit determines said rectangular region in parallel to the scanning lines of said output unit of said receiving apparatus.

34. (New) A transmitting apparatus according to claim 22, wherein:

said transmitting apparatus serves also as said video signal generating apparatus;

said transmitting apparatus and said video signal generating apparatus are a personal computer; and

said receiving apparatus is a liquid crystal display projector, a DLP projector, or a PDP.

35. (New) A transmitting apparatus according to claim 23, wherein:

said transmitting apparatus serves also as said video signal generating apparatus;

said transmitting apparatus and said video signal generating apparatus are a personal computer; and

said receiving apparatus is a liquid crystal display projector, a DLP projector, or a PDP.

36. (New) An image processing system comprising:

a receiving apparatus having a receiving unit receiving a transmitted video signal and an output unit outputting said received video signal by means of scanning lines;

a video signal generating apparatus of generating a video signal constructed with frames;

a transmitting apparatus having: a block dividing unit zone-dividing said frame into a predetermined number of blocks in parallel to the scanning lines of said output unit of said receiving apparatus; a region determining unit comparing each block of said predetermined frame generated by said block dividing unit with each block corresponding to the block within an immediately preceding frame of said predetermined frame, and thereby determining a rectangular region having a different pixel value; an extracting unit extracting a video signal included in (1) the determined rectangular region or (2) a rectangular region obtained from the determined rectangular region by applying a predetermined rule; and a transmitting unit coding the video signal extracted by said extracting unit and then transmitting the signal to said receiving apparatus.

37. (New) An image processing system according to claim 36, wherein:

said transmitting apparatus serves also as said video signal generating apparatus;

said video signal generating apparatus and said transmitting apparatus are a personal computer; and

said receiving apparatus is a liquid crystal display projector, a DLP projector, or a PDP.

38. (New) An image processing system comprising:

a receiving apparatus having a receiving unit receiving a transmitted video signal and an output unit outputting said received video signal by means of scanning lines;

a video signal generating apparatus of generating a video signal constructed with even number fields and odd number fields; and

a transmitting apparatus having: a block dividing unit zone-dividing said even number field or odd number field into a predetermined number of blocks in parallel to the scanning lines of said output unit of said receiving apparatus; a region determining unit comparing each block of said even number field or odd number field generated by said block dividing unit with each block corresponding to the block within an immediately preceding even number field or odd number field of said predetermined even number field or odd number field, and thereby determining a rectangular region having a different pixel value; an extracting unit extracting a video signal included in (1) the determined rectangular region or (2) a rectangular region obtained from the determined rectangular region by applying a predetermined rule; and a transmitting unit coding the video signal extracted by said extracting unit and then transmitting the signal to said receiving apparatus.

39. (New) An image processing system according to claim 38, wherein:

said transmitting apparatus serves also as said video signal generating apparatus;

said video signal generating apparatus and said transmitting apparatus are a personal computer; and

said receiving apparatus is a liquid crystal display projector, a DLP projector, or a PDP.

40. (New) An image processing method of outputting a video signal generated by a video signal generating apparatus of generating said video signal constructed with frames, to a receiving apparatus having a receiving unit receiving a transmitted video signal and an output unit outputting said received video signal by means of scanning lines, said method comprising:

a block dividing step of zone-dividing said frame into a predetermined number of blocks in parallel to the scanning lines of said output unit of said receiving apparatus;

a region determining step of comparing each block of said predetermined frame generated at said block dividing step with each block corresponding to the block within an immediately preceding frame of said predetermined frame, and thereby determining a rectangular region having a different pixel value;

an extracting step of extracting a video signal included in (1) the determined rectangular region or (2) a rectangular region obtained from the determined rectangular region by applying a predetermined rule; and

a transmitting step of coding the video signal extracted at said extracting step and then transmitting the signal to said receiving apparatus.

41. (New) An image processing method of outputting a video signal generated by a video signal generating apparatus of generating said video signal constructed with even number fields and odd number fields, to a receiving apparatus having a receiving unit of receiving a transmitted video signal and an output unit of outputting said received video signal by means of scanning lines, said method comprising:

a block dividing step of zone-dividing said even number field or odd number field into a predetermined number of blocks in parallel to the scanning lines of said output unit of said receiving apparatus;

a region determining step of comparing each block of said even number field or odd number field generated at said block dividing step with each block corresponding to the block within an immediately preceding even number field or odd number field of said predetermined even number field or odd number field, and thereby determining a rectangular region having a different pixel value;

an extracting step of extracting a video signal included in (1) the determined rectangular region or (2) a rectangular region obtained from the determined rectangular region by applying a predetermined rule; and

a transmitting step of coding the video signal extracted at said extracting step and then transmitting the signal to said receiving apparatus.

42. (New) A computer-processible recording medium having a program of causing a computer to serve, in a transmitting apparatus according to claim 22, as:

a block dividing unit zone-dividing said frame into a predetermined number of blocks in parallel to the scanning lines of said output unit of said receiving apparatus;

a region determining unit comparing each block of said predetermined frame generated by said block dividing unit with each block corresponding to the block within an immediately preceding frame of said predetermined frame, and thereby determining a rectangular region having a different pixel value;

an extracting unit extracting a video signal included in (1) the determined rectangular region or (2) a rectangular region obtained from the determined rectangular region by applying a predetermined rule; and

a transmitting unit coding and transmitting the video signal extracted by said extracting unit, in accordance with said receiving apparatus.

43. (New) A computer-processible recording medium having a program of causing a computer to serve, in a transmitting apparatus according to claim 23, as:

a block dividing unit zone-dividing said even number field or odd number field into a predetermined number of blocks in parallel to the scanning lines of said output unit of said receiving apparatus;

a region determining unit comparing each block of said even number field or odd number field generated by said block dividing unit with each block corresponding to the block within an immediately preceding even number field or odd number field of said predetermined even number field or odd number field, and thereby determining a rectangular region having a different pixel value;

an extracting unit extracting a video signal included in (1) the determined rectangular region or (2) a rectangular region obtained from the determined rectangular region by applying a predetermined rule; and

a transmitting unit of coding the video signal extracted by said extracting unit and then transmitting the signal to said receiving apparatus.